Appl. No.: 10/798,058

Amdt. dated September 26, 2006

Reply to Office Action of August 9, 2006

Amendments to the Specification:

Please replace the paragraph beginning on page 37, line 6 with the following replacement paragraph:

An *in vitro* system is developed to demonstrate the functionality of a *Bt* toxin receptor of the invention. Well known molecular biological methods are used in cloning and expressing the BCW *Bt* toxin receptor in Sf9 cells. A baculovirus expression system (GibeoGIBCOTM Invitrogen Corporation, Carlsbad, California) is used according to the manufacturer's provided protocols and as described below. *S. frugiperda* (Sf9) cells obtained from ATCC (ATCC-CRL 1711) are grown at 27°C in Sf-900 II serum free medium (GibeoGIBCOTM Invitrogen Corporation, Carlsbad, California). These cells, which are not susceptible to Cry1Ab toxin, are transfected with an expression construct (pFastBac1 bacmid, GibeoGIBCOTM Invitrogen Corporation, Carlsbad, California) comprising an operably linked *Bt* toxin receptor of the invention (SEQ ID NO:1) downstream of a polyhedrin promoter. Transfected Sf9 cells express the BCW *Bt* toxin receptor and are lysed in the presence of Cry1Ab toxin. Toxin specificities, binding parameters, such as K_d values, and half maximal doses for cellular death and/or toxicity are also determined.

Please replace the paragraph beginning on page 37, line 26 with the following replacement paragraph:

For transfection, 2μg each RBBCW1 or RBGUS DNA is mixed with 6 μl of CellFectin (Gibeo GIBCOTM Invitrogen Corporation, Carlsbad, California) in 100 μl of Sf900 medium, and incubated at room temperature for 30 minutes. The mixture is then diluted with 0.8 ml Sf-900 medium. Sf9 cells (10⁶/ml per 35 mm well) are washed once with Sf-900 medium, mixed with the DNA/CellFectin mixture, added to the well, and incubated at room temperature for 5 hours. The medium is removed and 2 ml of Sf-900 medium containing penicillin and streptomycin is added to the well. 3-5 days after transfection, Western blotting is used to examine protein expression.